Issued by:

Cereal Disease Laboratory

U.S. Department of Agriculture Agricultural Research Service 1551 Lindig St, University of Minnesota St. Paul, MN 55108-6052 (612) 625-6299 FAX (651) 649-5054 Mark.Hughes@ars.usda.gov For the latest cereal rust news from the field, subscribe to the cereal-rust-survey listserv list. To subscribe, please visit: http://www.ars.usda.gov/Main/docs.htm?docid=9970

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Reports from this list as well as all Cereal Rust Bulletins are maintained on the CDL website (http://www.ars.usda.gov/mwa/cdl)

- Wheat leaf rust was found in plots in SE and SW Louisiana and fields in the Mississippi Delta and SC Oklahoma.
- Wheat stripe rust is active in Louisiana, Mississippi, Arkansas and California.
- Oat stem rust was found in plots in southeastern Louisiana.
- Oat crown rust was heavy in plots in southeastern Texas.

For original, detailed reports from our cooperators and CDL staff, please visit the <u>Cereal Rust Situation</u> (CRS) reports page on the CDL website or click the CRS link found throughout the bulletin.

Cool March weather in the Great Plains and eastward delayed small grain development, planting and field work in the Great Lakes and Midwest. Welcome recent rains in the central and southern Great Plains did not substantially improve winter wheat conditions there. Thirty six percent of the U.S. winter wheat crop was in good to excellent condition on March 31, a slight improvement from 33 percent on November 25, 2012. Recent cold weather led to some freeze damage in winter wheat in northern Texas.

Wheat stem rust. Not yet reported this year in the U.S.

Wheat leaf rust.

Texas – There have been no new reports from the state, previously wheat leaf rust was reported from trace to 80S in plots in south Texas (see <u>CRB #1</u>).

Oklahoma – Low levels of wheat leaf rust were found on the winter wheat cultivar Overley (boot to head emergence) near Devol in south central Oklahoma the second week of April. This is the first cereal rust report in Oklahoma in 2013.

Louisiana – High levels of leaf rust were found in plots in south central and southwestern Louisiana on April 2. Recent rains and morning dews created conditions conducive for further development (see <u>CRS</u>). Previously, low levels of wheat leaf rust were reported in plots at Baton Rouge in southeastern Louisiana in early March.

Mississippi – Low levels of leaf rust were found in three counties in the Delta area in late March.

Wheat leaf rust map. Please visit: (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Wheat cultivar *Lr* gene postulation database. *Please visit*: <u>Leaf rust resistance gene postulation in current U.S.</u> wheat cultivars.

2012 wheat leaf rust race survey results are now available.



Wheat stripe rust.

Texas – There have been no new reports from the state, previously stripe rust (trace to 100S) was reported in plots in south Texas (see CRB #1).

Louisiana – High levels of wheat stripe rust were found in plots in south central and southwestern Louisiana on April 2 (see <u>CRS</u>). The rust was actively developing and recent rains and morning dews created conditions conducive for further development. Stripe rust was rapidly spreading in plots at Baton Rouge in early April. Stripe rust was active and developing in fields in central Louisiana the first week of April.

Mississippi – Wheat stripe rust was found in 9 counties in the Delta area of the state and one county in south central Mississippi by March 30 and the rust was severe at some locations (see <u>CRS</u>). Recent rains and moderate temperatures are conducive for further development.

Arkansas – Stripe rust has been reported numerous times in eastern Arkansas this year and the levels are much higher than those reported in 2012. This can be largely attributed to the cool, wet weather this year. The rust has been most frequently reported on two widely grown cultivars, Richocet and Beretta which both have some adult plant resistance to stripe rust (see <u>CRS</u> for more details). Stripe rust was heavy on a line in plots at Bay in northeastern Arkansas on April 4. The flag leaves were just emerging. Previously, stripe rust hot spots were reported in eastern and southeastern Arkansas (see <u>CRB #1</u>).

South Carolina – Low levels of stripe rust were found on winter wheat at early boot near Ashton in south central South Carolina on April 9.

California – Several stripe rust hot spots (severity up to 30%) were found in a commercial field of an unknown cultivar in Yolo County in late March. Stripe rust was also found on wild barley in Yolo County. Stripe rust has appeared later this season than in past years.

Washington – Winter wheat fields (Feekes 3-6) in eastern Washington were scouted on April 3. Wheat stripe rust was easily found and actively sporulating on lower leaves in fields in Adams and Lincoln counties in southeastern Washington. Stripe rust was also found in Franklin County, but at lower incidences than the fields in Adams and Lincoln counties. No stripe rust was found in Benton and Whitman counties.

In late March, stripe rust had developed up to 20% incidence and 50% severity in susceptible winter wheat spreader rows in nurseries near Walla Walla in southeastern Washington. Stripe rust had developed to 70% severity and 100% incidence in susceptible winter wheat spreader rows in nurseries at Mount Vernon in northwestern Washington.

Please send wheat and barley stripe rust collections as soon as possible after collection to:

Dr. Xianming Chen USDA-ARS 361 Johnson Hall P.O. Box 646430 Washington State University Pullman, WA 99164-6430 email: xianming@wsu.edu

Note: Stripe rust collections are vulnerable to heat and do not survive long at warm temperatures; therefore, if shipment of collections for race identification is delayed their viability will be greatly reduced. An overnight courier service is preferred for sending stripe rust collections.



Wheat stripe rust map. Please visit: (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Oat stem rust. Oat stem rust was found in plots at Baton Rouge in southeastern Louisiana on April 4. Previously, oat stem rust was found on an oat line at College Station in southern Texas on 2/25/13.

Oat crown rust. High levels of oat crown rust (80% severity, 80% prevalence) were found in plots (Feekes 8-10) at Garwood in southeastern Texas in late March. Previously, oat crown rust was found in plots in the Florida panhandle, southeastern Louisiana plots and a field in southeastern Mississippi (see CRB #1).

Oat crown rust map. Please visit: (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Barley stem rust. Not yet reported in the U.S. this year.

Barley leaf rust. There have been no new reports of barley leaf rust since it was found in plots at Warsaw, Virginia on January 10.

Barley leaf rust map. Please visit: (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

Barley stripe rust. Not yet reported this year in the U.S.

Rye stem rust. Not yet reported this year in the U.S.

Rye leaf rust. Not yet reported this year in the U.S.